 <b>Independent Verification &amp; Validation Facility</b>	<b>Work Instruction for Processing Research Deliverables</b>	<b>IVV WI 09-3-5 Revision: Basic Effective Date: September 2003</b>
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APPROVAL SIGNATURES		DATE
Gregory Blaney (original signature on file)	QMS Management Representative	08/28/2003

REVISION HISTORY			
Rev. No.	Description of Change	Author	Effective Date
Basic	Initial Release	Frank Gmeindl	09/10/2003

REFERENCE DOCUMENTS	
Document Number	Document Title
NPG 1441.1	NASA Records Retention Schedules
NPG 5100.4B	Federal Acquisition Regulation Supplement
NPG 5800.1E	Grants and Cooperative Agreement Handbook
IVV 16	Control of Quality Records System Level Procedure
IVV 09-3	Research Program
IVV WI 09-3-7	Work Instruction for Publication/Presentation of Research Results

CHECK THE MASTER LIST at <http://iso9000.ivv.nasa.gov/>  
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## 1.0 Purpose

The purpose of this work instruction is to establish a consistent method for processing research deliverables that are delivered to the NASA Independent Verification and Validation (IV&V) Facility through the Center Initiative Management (CIM) Tool. This work instruction is one of a set of work instructions for implementing System Level Procedure IVV 09-3 Research Program. This work instruction is intended to be compliant with NASA Procedures and Guidelines (NPG) 5100.4B, Federal Acquisition Regulation Supplement (NASA/FAR Supplement), and NPG 5800.1E, Grants and Cooperative Agreement Handbook.


## 2.0 Scope

This work instruction is applicable to all research initiative deliverables. This work instruction is applicable to all research initiative PI's, research initiative Government POC's, the IV&V Facility Research Lead, the IV&V Facility Research Support Contractor, and other IV&V personnel involved with the research program.

## 3.0 Definitions and Acronyms

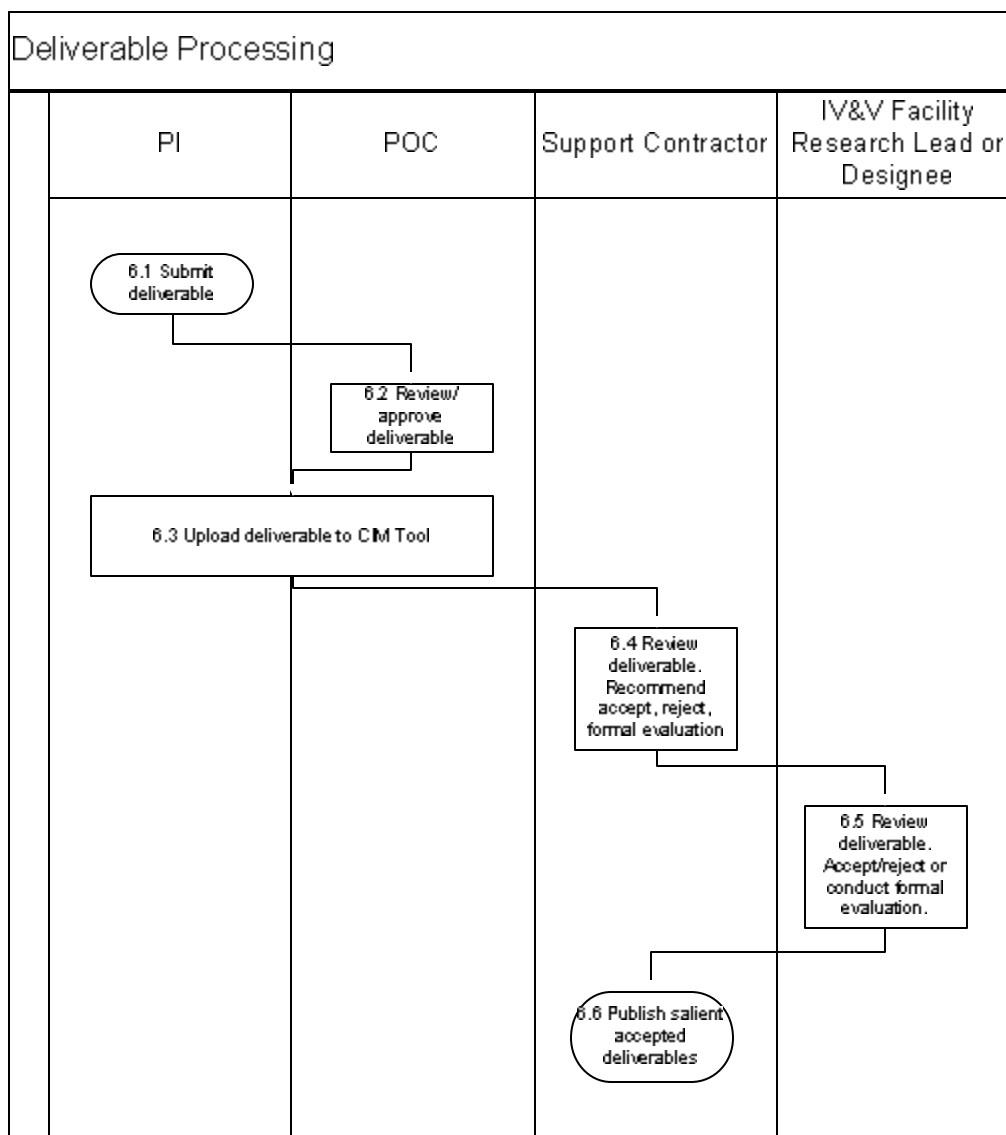
### 3.1 Acronyms

CIM	Center Initiative Management
IV&V	Independent Verification and Validation
NASA	National Aeronautics and Space Administration
NPG	NASA Procedures & Guidelines
PI	Principal Investigator
POC	Point of Contact
QMS	Quality Management System


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#### 4.0 Flow Chart

Figure 4-1 is a flowchart of the deliverable processing process. The procedures and work instructions for this process are described in section 6 below. The step numbers in Figure 4-1 correspond with the step numbers in section 6.



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## 5.0 Responsibilities

### 5.1 IV&V Facility Research Lead or Designee

Shall:

- Review all initiative deliverables,
- Accept or reject deliverables, or direct that a formal evaluation be conducted.

### 5.2 Support Contractor Program Manager


Shall:

- Perform cursory reviews of deliverables within 24 hours of receipt to ensure that deliverables do not contain NASA software development project data that the project did not authorize for release, meet the objectives of the proposed research and meet the typical quality standards for readability, communication of information, and suitability for the expected audience,
- Provide review recommendations to the IV&V Facility Research Lead or designee,
- Conduct or arrange formal deliverable evaluations as required by IV&V Facility Research Lead or designee,
- Ensure that deliverables to be published are cleared for public release as defined in WI 09-3-7,
- Publish salient research results on the results repository (<http://sarpresresults.ivv.nasa.gov/>).

### 5.3 Center Initiative Management (CIM) Tool

Shall:

- Display to authorized users, deliverables, due dates and status,
- Provide guidance to PI's and Government POC's for uploading deliverables,
- Accept deliverables that PI's or Government POC's upload,
- Put deliverables for review in appropriate user queues,

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- Record contractor recommendations and comments,
- Record IV&V Facility Research Lead's or designee's comments and decisions,
- Notify appropriate users of deliverable status.

#### **5.4 CIM Tool Manager**

Shall:

- Maintain deliverable status data in the CIM Tool,
- Submit the location of the "Formal Evaluation Report" (the URL where the Formal Evaluation can be found) to the CIM Tool.

#### **5.5 Government Points Of Contact**

Shall:

- Review deliverables to ensure that they meet the requirements of the contract and that their technical content is satisfactory,
- Submit deliverables to the IV&V Facility through the CIM Tool or authorize the PI to submit them, and
- Process appropriate public release authorization forms.

#### **5.6 Principal Investigators**

Shall:

- Submit acceptable deliverables on time,
- Complete required public release authorization forms.


### **6.0 Procedure**

The following procedure describes the steps shown in Figure 4-1 - Flowchart.

#### **6.1 PI Submits Deliverable to Government POC**

Submit deliverable to Government POC, usually by e-mail.

#### **6.2 Government POC Reviews and Approves Deliverable**

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- Review and approve the deliverable, or negotiate revision with the PI.
- Ensure that the PI completed appropriate public release authorization (NASA form 1676 for documents, NASA form 1679 for software and other intellectual property that the PI wishes to protect, i.e. get a patent for.). (See “export control” section of PI Guide in CIM Tool, and ISO Work Instruction 9-3-7 for publishing research results.)
- Decide whether the POC or the PI will upload the approved deliverable to the CIM Tool.

### **6.3 PI or Government POC Uploads Deliverable to the CIM Tool**

- Log on to CIM Tool.
- Click on "2003 (or appropriate year) Initiatives" in the navigation menu.
- Click on the name of the initiative for which you want to submit a deliverable.
- Click on the name of the deliverable you wish to submit,
- Click the "Submit Deliverable" button at the bottom of the deliverable window and follow the directions. The CIM Tool will allow upload of the deliverable from local hard disk OR, if the deliverable is too large or not electronic, place a comment describing the alternative avenue by which the product will be delivered. Be sure to put the e-mail address of the PI and the Government POC in the appropriate field before clicking the “Complete Submission” button so that the PI and the POC will be notified when your deliverable is accepted.

### **6.4 Support Contractor Program Manager Reviews Deliverables and Recommends Accept, Reject, or Formal Evaluation**

Once the deliverable is received in the CIM Tool, the CIM Tool notifies the Support Contractor that a deliverable is awaiting contractor action and the CIM Tool puts the deliverable into the Support Contractor’s queue. The Support Contractor CIM Tool Manager changes the deliverable status from due to submitted. Then, the Support Contractor Program Manager reviews the deliverable and provides recommendations to the IV&V

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Facility Research Lead via the CIM Tool. Then, the CIM Tool puts the deliverable with the Support Contractor's recommendation and comments into the IV&V Facility Research Lead's queue and notifies him that the deliverable is awaiting government action.

## **6.5 IV&V Facility Research Lead or Designee Reviews Deliverables and Accepts/Rejects or Conducts Formal Evaluation**


The IV&V Research Lead reviews the deliverables in his queue and decides whether to accept them, reject them or, if the Support Contractor Program Manager recommends a formal evaluation, whether to conduct a formal evaluation. The IV&V Research Lead may also add explanatory remarks to his decision. When the IV&V Research Lead submits his decision, the CIM Tool opens a form to send an e-mail to the PI that notifies the PI of the disposition of his or her deliverable. If the IV&V Research Lead decides to conduct a formal evaluation of the deliverable, he may conduct the formal evaluation or delegate it to the Support Contractor. If he delegates it to the Support Contractor, the Support Contractor can conduct the formal evaluation or subcontract the formal evaluation to one of its government approved subcontractors. After the formal evaluation is completed, the review process re-cycles.

## **6.6 Support Contractor Publishes Salient Accepted Deliverables**

The Support Contractor publishes accepted document deliverables or accepted software deliverables that will have a significant impact on the state of the practice of software assurance. The Support Contractor publishes the deliverables on the Results repository (<http://sarpresults.ivv.nasa.gov/>). Before publishing the results, the Support Contractor ensures that the deliverable is cleared for public release by either the NASA form 1676 or the NASA form 1679 as appropriate. See IVV WI 9-3-7 for instructions for publishing deliverables.

## **7.0 Metrics**

The IV&V Facility uses the CIM Tool to track planned vs. actual progress of initiatives. The tool maintains a database of proposals, evaluations, initiatives, deliverables, and reviews. For deliverables, the CIM Tool tracks due date, submittal date, review dates, and accept/reject/further evaluation decisions.

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## 8.0 Records

The following records, as shown in Table 8-1, are generated and managed in accordance with IVV 16 and reference to NPG 1441.1, NASA Records Retention Schedules.

Document Name and Identification Number	User Responsible for Record Retention	Retention Requirement	Location
Delivered CI/UI/FI Deliverables	Research Lead	Permanent	CIM Tool

Table 8-1: Records Generated and Managed